

## STATE OF SOUTH CAROLINA

Petition of South Carolina Electric & Gas Company  
for an order authorizing the deferment of costs  
incurred in connection with the temporary remedial  
measures and permanent reconfiguration of the flow  
of coolant in the pressurized water reactor at V.C.  
Summ

BEFORE THE  
PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA

## COVER SHEET

DOCKET

NUMBER: 2007 - 292 - E

(Please type or print)

Submitted by: K. Chad BurgessSC Bar Number: 69456

Address: SCANA Corp.  
1426 Main Street MC 130  
Columbia, SC 29201

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Other: \_\_\_\_\_

Email: chad.burgess@scana.com

NOTE: The cover sheet and information contained herein neither replaces nor supplements the filing and service of pleadings or other papers as required by law. This form is required for use by the Public Service Commission of South Carolina for the purpose of docketing and must be filled out completely.

## DOCKETING INFORMATION (Check all that apply)

☐ Emergency Relief demanded in petition ☐ Request for item to be placed on Commission's Agenda expeditiously

☐ Other: \_\_\_\_\_

INDUSTRY (Check one)	NATURE OF ACTION (Check all that apply)		
<input checked="" type="checkbox"/> Electric	<input type="checkbox"/> Affidavit	<input type="checkbox"/> Letter	<input type="checkbox"/> Request
<input type="checkbox"/> Electric/Gas	<input type="checkbox"/> Agreement	<input type="checkbox"/> Memorandum	<input type="checkbox"/> Request for Certification
<input type="checkbox"/> Electric/Telecommunications	<input type="checkbox"/> Answer	<input type="checkbox"/> Motion	<input type="checkbox"/> Request for Investigation
<input type="checkbox"/> Electric/Water	<input type="checkbox"/> Appellate Review	<input type="checkbox"/> Objection	<input type="checkbox"/> Resale Agreement
<input type="checkbox"/> Electric/Water/Telecom.	<input type="checkbox"/> Application	<input checked="" type="checkbox"/> Petition	<input type="checkbox"/> Resale Amendment
<input type="checkbox"/> Electric/Water/Sewer	<input type="checkbox"/> Brief	<input type="checkbox"/> Petition for Reconsideration	<input type="checkbox"/> Reservation Letter
<input type="checkbox"/> Gas	<input type="checkbox"/> Certificate	<input type="checkbox"/> Petition for Rulemaking	<input type="checkbox"/> Response
<input type="checkbox"/> Railroad	<input type="checkbox"/> Comments	<input type="checkbox"/> Petition for Rule to Show Cause	<input type="checkbox"/> Response to Discovery
<input type="checkbox"/> Sewer	<input type="checkbox"/> Complaint	<input type="checkbox"/> Petition to Intervene	<input type="checkbox"/> Return to Petition
<input type="checkbox"/> Telecommunications	<input type="checkbox"/> Consent Order	<input type="checkbox"/> Petition to Intervene Out of Time	<input type="checkbox"/> Stipulation
<input type="checkbox"/> Transportation	<input type="checkbox"/> Discovery	<input type="checkbox"/> Prefiled Testimony	<input type="checkbox"/> Subpoena
<input type="checkbox"/> Water	<input type="checkbox"/> Exhibit	<input type="checkbox"/> Promotion	<input type="checkbox"/> Tariff
<input type="checkbox"/> Water/Sewer	<input type="checkbox"/> Expedited Consideration	<input type="checkbox"/> Proposed Order	<input type="checkbox"/> Other:
<input type="checkbox"/> Administrative Matter	<input type="checkbox"/> Interconnection Agreement	<input type="checkbox"/> Protest	
<input type="checkbox"/> Other:	<input type="checkbox"/> Interconnection Amendment	<input type="checkbox"/> Publisher's Affidavit	
	<input type="checkbox"/> Late-Filed Exhibit	<input type="checkbox"/> Report	

187710

K. Chad Burgess  
Senior Counsel

chad.burgess@scana.com



August 10, 2007

**Via Hand-Delivery**

The Honorable Charles Terreni  
Chief Clerk/Administrator  
**South Carolina Public Service Commission**  
101 Executive Center Drive (29210)  
Post Office Drawer 11649  
Columbia, South Carolina 29211

RECEIVED  
2007 AUG 10 PM 12:27  
SC PUBLIC SERVICE  
COMMISSION

RE: Petition of South Carolina Electric & Gas Company for an order authorizing the deferment of costs incurred in connection with the temporary remedial measures and permanent reconfiguration of the flow of coolant in the pressurized water reactor at V.C. Summer Nuclear Station

Dear Mr. Terreni:

Enclosed for filing in the above-captioned matter is the original and one (1) copy of the Petition of South Carolina Electric & Gas Company in the above referenced matter. Please acknowledge your receipt of this document by file-stamping the extra copy that is enclosed and returning it to me via our courier.

By copy of this letter we are serving a copy of the Petition upon the South Carolina Office of Regulatory Staff and enclose a Certificate of Service to that effect.

If you have any questions, please do not hesitate to contact me.

Very truly yours,

K. Chad Burgess

KCB/kms  
Enclosures

cc: Nanette S. Edwards, Esquire  
(via hand delivery w/enclosures)

**BEFORE**  
**THE PUBLIC SERVICE COMMISSION OF**  
**SOUTH CAROLINA**  
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IN RE:

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permanent reconfiguration of the flow of )  
coolant in the pressurized water reactor at )  
at V.C. Summer Nuclear Station. )  
\_\_\_\_\_ )

PETITION OF SOUTH CAROLINA  
ELECTRIC & GAS COMPANY  
FOR AN ACCOUNTING ORDER

South Carolina Electric & Gas Company ("SCE&G" or the "Company") hereby files with the South Carolina Public Service Commission ("Commission") this petition, pursuant to S.C. Code Ann. § 58-27-1540 (Supp. 2006) and 26 S.C. Code Ann. Reg. 103-825 (1976, as amended), seeking an accounting order for regulatory accounting purposes authorizing SCE&G to defer all costs incurred in connection with the Company's reconfiguration of the flow of coolant in the pressurized water reactor of V.C. Summer Nuclear Station ("Summer Station") to minimize the effects of baffle jetting, including the costs that SCE&G incurred in 2007 in connection with its temporary remedial measure of fuel rod clipping and any future costs that the Company may incur associated with fuel rod clipping to minimize baffle jetting.

The request for relief set forth herein will not involve a change to any of SCE&G's rates or prices, or require any change in any Commission rule, regulation or policy. In addition, the issuance of the requested accounting order will not prejudice the right of any party to address this issue in a subsequent general rate case proceeding. Accordingly, neither notice to the public at-large, nor a hearing is required regarding this Petition.

In support of this Petition, the Company would respectfully show unto this Commission the following key facts and would request of and apply to the Commission for the following relief:

1. SCE&G is a corporation organized and existing under the laws of the State of South Carolina. Further, SCE&G is an electric utility engaged in the generation, transmission, distribution, and sale of electricity to the public for consumption. SCE&G's retail electric operations are subject to the jurisdiction of the Commission pursuant to the provisions of Chapter 27 of Title 58 of the South Carolina Code.

2. Corporate legal counsel for SCE&G in this proceeding are as follows:

Catherine D. Taylor, Esquire  
K. Chad Burgess, Esquire  
**South Carolina Electric & Gas Company**  
1426 Main Street, MC 130  
Columbia, South Carolina 29201  
Telephone: 803-217-8141  
Facsimile: 803-217-7931  
cdtaylor@scana.com  
chad.burgess@scana.com

All correspondence and any other matters of any kind relative to this proceeding should be addressed to the Company's authorized representatives as stated hereinabove.

3. SCE&G operates a nuclear facility in Jenkinsville, South Carolina. The reactor at Summer Station is a pressurized water reactor which requires cooling. In order to cool the reactor, a flow of water is directed through the vessel, core barrel and baffle plate regions. The coolant currently flows in a downflow configuration which results in a high differential pressure between the baffle plate and core. Within the nuclear industry, many reactors of this design (*i.e.*, downflow configuration) have experienced "baffle jetting", which is a hydraulic induced instability or vibration of fuel rods caused by the high velocity jet of water flowing through the

reactor. In some instances, baffle jetting can cause fuel rods to leak and disburse uranium into the coolant; therefore, remedial measures must be taken to prevent such an occurrence.

4. In 2003-2004, one (1) fuel rod assembly at Summer Station experienced damage as a result of baffle jetting. During refuel outage number sixteen (16), SCE&G identified the damaged fuel rod assembly and removed it from service.

5. In an attempt to prevent future baffle jetting damage, SCE&G implemented an interim, industry accepted engineering solution known as fuel rod clipping. Fuel rod clipping minimizes fuel rod vibration caused by baffle jetting, but it is a temporary solution. To combat the effects of baffle jetting, a long-term remedial measure is required.

6. The nuclear industry has determined that the best long-term solution for baffle jetting is to reverse the flow of coolant from a downflow configuration to an upflow configuration. This reconfiguration is designed to equalize the differential hydraulic pressure within the core and thus, prevent the baffle jetting effect.

7. The Company plans to conduct the upflow conversion during refuel outage number eighteen (18) in 2009. In the meantime, the Company will continue its practice of fuel rod clipping, if necessary, to reduce the effects of baffle jetting.

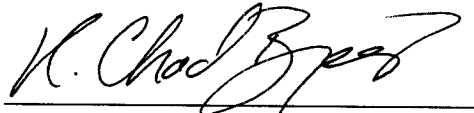
8. Over the next three (3) years, SCE&G expects to spend approximately \$5.5 million to engineer and implement the upflow reconfiguration. While the vast majority of this projected cost consists of the upflow reconfiguration itself, a small portion of this cost includes the costs that the Company incurred in 2007 in connection with its temporary remedial measure of fuel rod clipping.

9. In anticipation of conducting the upflow conversion, SCE&G seeks authorization from the Commission to defer all cost incurred in connection with the reconfiguration, including

the costs incurred in 2007 related to fuel rod clipping and any future costs that the Company may incur associated with fuel rod clipping.

**WHEREFORE**, having set forth its Petition, SCE&G respectfully requests that the Commission issue an order (i) granting the Company the authority to defer all costs incurred in connection with the Company's reconfiguration of the flow of coolant in the pressurized water reactor of V.C. Summer Nuclear Station, including the costs that the Company incurred in 2007 in connection with its temporary remedial measure of fuel rod clipping and any future costs that the Company may incur associated with fuel rod clipping; and (ii) granting such other and further relief as is just and proper.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "K. Chad Burgess", is written over a horizontal line.

Catherine D. Taylor, Esquire  
K. Chad Burgess, Esquire  
1426 Main Street, MC 130  
Columbia, South Carolina 29201  
Telephone: 803-217-8141  
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cdtaylor@scana.com  
chad.burgess@scana.com

Attorneys for Petitioner  
South Carolina Electric & Gas Company

Columbia, South Carolina  
August 10, 2007

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coolant in the pressurized water reactor at )  
V.C. Summer Nuclear Station, )  
\_\_\_\_\_ )

**CERTIFICATE  
OF SERVICE**

This is to certify that I have caused to be served this day one (1) copy of South Carolina Electric & Gas Company's **Petition** via hand delivery to the person named below at the address set forth:

Nanette S. Edwards, Esquire  
Office of Regulatory Staff  
1441 Main Street, Suite 300  
Columbia, SC 29201

  
\_\_\_\_\_  
Karen M. Scruggs

Columbia, South Carolina  
This 10<sup>th</sup> day of August 2007